

20070425.ba v04_n044.bam.20070425

>From ???@??? Wed Apr 25 09:34:02 2007 -0500
Date: Wed, 25 Apr 2007 14:33:04 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 4044
Message-Id: <20070425143310.971E4470159@srvr1.theporch.com>

BOATANCHORS Digest 4044

Topics covered in this issue include:

- 1) Viking Ranger kit instruction manual
by "Jack Colson" <jcolson7@tampabay.rr.com>
- 2) Re: Old 'Lytics
by "David Stinson" <arc5@ix.netcom.com>
- 3) Re: Old 'Lytics
by "Ken" <n5cm@rtconline.com>
- 4) Re: Old 'Lytics (BANG!)
by Jack Harper <jharper@frobenius.com>
- 5) Re: Old 'Lytics (BANG!)
by Bob Roehrig <broehrig@aurora.edu>
- 6) Re: Old 'Lytics
by "Tom Rauch" <w8ji@contesting.com>
- 7) Re: Old 'Lytics
by Al Klase <al@ar88.net>
- 8) Re: Old 'Lytics
by WA5JCI <wa5jci@flash.net>
- 9) Re: Old 'Lytics
by "Howard Weeks" <weeksh@bellsouth.net>
- 10) RME S-meter
by spr@earthlink.net
- 11) Re: Old 'Lytics
by W7QH0@aol.com
- 12) Re: Old 'Lytics
by "Arden Allen" <gumbear@pacbell.net>
- 13) Re: Old 'Lytics
by "Arden Allen" <gumbear@pacbell.net>
- 14) Re: Old 'Lytics
by "Brian A Clarke" <brianclarke01@optusnet.com.au>
- 15) Old Oil Filled (was: Old 'Lytics)
by "David Stinson" <arc5@ix.netcom.com>
- 16) Power Saving Device (Ya Right!)
by Jerry Proc <jerry7proc@yahoo.com>
- 17) Re: Power Saving Device (Ya Right!)
by "David Stinson" <arc5@ix.netcom.com>
- 18) Re: Power Saving Device (Ya Right!)

by "John Gillespie" <jgillespie@porchlight.ca>
19) Re Jerry's: We haven't bashed any electrical/electronic "snake...
by "Herbert M. Rosenthal" <herbrose@comcast.net>
20) RE: Power Saving Device (Ya Right!)
by "Grant Youngman" <nq5t@tx.rr.com>
21) RE: Power Saving Device (Ya Right!)
by AB Bonds <ab@vuse.vanderbilt.edu>

Message-ID: <00d901c786ab\$18a0f600\$0501a8c0@jack7gfusd5gxr>
From: "Jack Colson" <jcolson7@tampabay.rr.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Viking Ranger kit instruction manual
Date: Tue, 24 Apr 2007 15:59:40 -0400
MIME-Version: 1.0
Content-Type: text/plain;
format=flowed;
charset="iso-8859-1";
reply-type=original
Content-Transfer-Encoding: 7bit

I am in process of putting a Viking Ranger I back together and wonder if anyone might have the original set of kit building instructions. I am only interested in a small section or two.

Thank you,
73
Jack, W3TMZ

Message-ID: <003101c786ae\$9f43ca40\$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics
Date: Tue, 24 Apr 2007 15:24:54 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="UTF-8"
Content-Transfer-Encoding: 7bit

We've all talked about re-forming caps many times,
but we all learn new things as we go along
and a good method of doing something often
evolves into something better.
Has a consensus been reached as to the best method,
or is it still open to debate?

73 D.S.

"Blog:" A toxic waste dump where humans gather
to drain the septic sludge
that accumulates between their ears.

Message-ID: <003f01c786c3\$29e27480\$6b9c1f45@rtconline.com>
From: "Ken" <n5cm@rtconline.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics
Date: Tue, 24 Apr 2007 15:51:57 -0700
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Al & Gang,

Someone, I think, identified the problem. The early electrolytics had liquid electrolyte whereas the later ones had a paste electrolyte. So, I think that at the time I was aware of the fact and figured that by turning on its side the electrolyte would be incontact with the electrodes.

Another thing about electrolytics, they can explode. I was working on a table model radio back in early 50's and with the underside of the radio facing me, I turned away to pick up a tool or something and at that very moment a tubular electrolytic exploded. If it had happened before I turned away, it could have blinded me! That taught me an import lesson, Don't Trust Electrolytics! Wear eye protection!
Take care,

Ken N5CM

----- Original Message -----
From: "Al Klase" <al@ar88.net>

Date: Tue, 24 Apr 2007 15:22:37 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: Jack Harper <jharper@frobenius.com>
Subject: Re: Old 'Lytics (BANG!)
Mime-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"; format=flowed
Content-Transfer-Encoding: quoted-printable
Message-Id: <20070424212247.93F324700E2@srvr1.theporch.com>

Ken, N5CM said:

>Another thing about electrolytics, they can explode.
>I was working on a table model radio back in early 50's
>and with the underside of the radio facing me, I turned
>away to pick up a tool or something and at that very
>moment a tubular electrolytic exploded. If it had happened
>before I turned away, it could have blinded me! That
>taught me an import lesson, Don't Trust Electrolytics!
>Wear eye protection!

Amen to that.

On New Year's Eve 1969, just a few minutes before=20
1970, I was working a station somewhere on 40M CW=20
with my Heathkit DX-35 transmitter when one of=20
the 20mfd 450WVDC electrolytics in the power=20
supply let go (there were two each paralleled=20
with a 20K power resister - amazing what you remember after 37-years :)

It sounded like a .22 round had been fired close=20
by along with a horrible odor and plenty of acrid=20
smoke (it took the power transformer with it - or=20
perhaps, the other way around). My parents came=20
running (I was 17) to see me cringing behind the trash can in the corner.

I was quite surprised -- powered everything down=20
and chased the parents away -- opened the DX-35=20
up and there was black acidic/alkalinic(?) hot=20
goo *everywhere* on the inside sprayed by the=20
split capacitor. It made a tremendous mess (I=20
still have that DX-35 and remnants of the "goo" are *still* there :)

As an aside, back in 1967 whilst working (when I=20
was 15 :) on my Novice ticket with my Elmer,=20
Frank Miser Price -- W5DY0 -- near Bentonville,=20
Arkansas, he was transmitting with his Viking I=20
transmitter into his inverted V, showing me how=20
it's done, when there was a terrific BANG --=20
Frank reached over and pulled the Big Switch. We=20
sat there staring at each other for a minute.

Once we recovered our senses, we took the cover=20
off and found only a little scorched place=20
somewhere near the 4D32 final surrounded by burnt=20
and blasted legs -- Figured out that a spider had=20
gotten across, to its detriment, the B+ POW! :)

Naturally, that was my first thought when the=20
DX-35 exploded a couple of years later -- but=20
there was too much smoke etc for a little spider=20
-- "Perhaps a Rat is across the B+" was my first thought :)

Regards to the List from a Snowy Rocky Mountains=20
(Two feet so far - and it's still coming down :)

Jack, W=D8YJ (Friend to all things Hammarlund)
Evergreen, Colorado USA

Date: Tue, 24 Apr 2007 16:41:59 -0500 (CDT)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics (BANG!)
Message-ID: <Pine.LNX.4.61.0704241639350.14262@hermes.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII; format=flowed

I had a cap explode in a Hickok scope one time. I don't remember the
value, but it was on the HV DC for the CRT. I think the cap was maybe 1uf
but it was a large vertical can. Luckily the scope was in the case, which
was heavy guage steel. The can went up like a rocket and dented the top of
the case.

Bob Roehrig
Aurora University Telecom dept.
broehrig@aurora.edu
K9EUI W9ZGP WD2XSH/19
630-844-4898 fax 630-844-4222
"Nostalgia is a thing of the past"

Message-ID: <042c01c786bd\$5a08b710\$660fa8c0@radiatoroom>

From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Ken" <n5cm@rtconline.com>
Subject: Re: Old 'Lytics
Date: Tue, 24 Apr 2007 18:10:12 -0400
MIME-Version: 1.0
Content-Type: text/plain;
 format=flowed;
 charset="iso-8859-1";
 reply-type=original
Content-Transfer-Encoding: 7bit

> Don't forget temperature. Most modern electrolytics are
> rated to operate for so many hours at the specified
> voltage and some temperature. For example 1000 hours at
> rated voltage and 40 degrees C. That would include ambient
> temperature as well as component temperature due to ripple
> current. You would need a manufacturer's data sheet to
> look at the curves to get more definitive answers.

Right you are.

There are formulas that must be applied to use the rated life, rated ripple current, rated temperature, and rated voltage to estimate a real estimate of mean time before failure.

Running significantly lower voltage is not always worthwhile, and sometimes not even good (the capacitor can deform). Temperature is the real villain, not voltage (once under the rating).

I'm sure a web search would come up with the correct and accurate explanation, but I'm also positive the real problem with life is temperature (once we are safely below rated operating voltage).

As for reforming a current limited supply like Marty suggested is the cat's meow. Just use a high value resistance in series with a supply at the rated peak voltage of the cap. Limit the capacitor dissipation according to size, so it doesn't overheat.

73 Tom

Message-ID: <462E929C.2020400@ar88.net>
Date: Tue, 24 Apr 2007 19:28:28 -0400
From: Al Klase <al@ar88.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 7bit

Dave,

I prefer to reform electrolytics using a regulated bench supply that has both a voltmeter and milliammeter. You can bring the voltage up until some current flows, 10-20 mA, and see the current fall back as the cap forms. Then increase the voltage, and kinda chase the current back up until you get to the rated voltage or perhaps a little more. Most cap will form in just a minute or so. If things are going slowly, I'd resort to Marty R's method with a current limiting resistor and supply set to high voltage. Just go away, and await further developments.

Watch out for heating. Explosions are no joke. I recently had somebody's home-brew supply for an SP-200 operating on my living-room floor. It had been working just fine for about three weeks. My girlfriend came into the office and said "I think one of your radios exploded!" A twist-prong 20/450 electrolytic, a CD I think, had let go. It left a 3/4-inch dent in the ceiling 20 feet up. 'Nuff said.

Regards,
Al

David Stinson wrote:

> We've all talked about re-forming caps many times,
> but we all learn new things as we go along
> and a good method of doing something often
> evolves into something better.
> Has a consensus been reached as to the best method,
> or is it still open to debate?

--
Al Klase - N3FRQ
Flemington, NJ
<http://www.skywaves.ar88.net/>

Message-Id: <7.0.1.0.1.20070424174116.01b3bb50@flash.net>
Date: Tue, 24 Apr 2007 17:44:57 -0500

To: Old Tube Radios <boatanchors@theporch.com>
From: WA5JCI <wa5jci@flash.net>
Subject: Re: Old 'Lytics
Cc: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I had one blow that was on a HB supply about twenty years old. The supply was for a radio that I left on 24/7. The can hit the ceiling but the bad part is the gunk that sprayed on the ceiling, bench and other stuff, really hard to remove, almost like epoxy.

de Pete WA5JCI

From: "Howard Weeks" <weeksh@bellsouth.net>
To: Old Tube Radios <boatanchors@theporch.com>
Date: Tue, 24 Apr 2007 18:50:15 -0400
MIME-Version: 1.0
Subject: Re: Old 'Lytics
Message-ID: <462E5167.622.223AE0@weeksh.bellsouth.net>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

I use a big old tube type regulated DC supply with volt meters and current meters. I hook up the cap and run the current up to about 20 mils and watch the volt meter to keep it under the WV of the cap. As it forms, the current will drop off to zero or near zero. I then up the voltage to bring the current back up to 20 mils. I keep doing this until the thing is running at rated voltage with zero leakage current. I also use this power supply to reform caps while mounted in the set. I just hook it to the input of the filter and use the same procedure as before. Must allow for bleeder resistors, etc or cut them loose. I have some tube socket adapters that I just plug into the rectifier socket. While at it, check coupling caps for leakage. Will also identify leaky bypasses in the process.

I usually give the reforming cap a finger test for heat. If it is heating up, you might want to reduce the current you are hitting it with until it reforms a bit.

Howard K5JCP

On 24 Apr 2007 at 15:24, David Stinson wrote:

> We've all talked about re-forming caps many times,

> but we all learn new things as we go along
> and a good method of doing something often
> evolves into something better.
> Has a consensus been reached as to the best method,
> or is it still open to debate?
>
> 73 D.S.
>
>
> -----
>
> "Blog:" A toxic waste dump where humans gather
> to drain the septic sludge
> that accumulates between their ears.
>

Howard Weeks
Harlem, GA
K5JCP

Message-ID: <31303555.1177460687723.JavaMail.root@elwamui-
hound.atl.sa.earthlink.net>
Date: Tue, 24 Apr 2007 20:24:47 -0400 (EDT)
From: spr@earthlink.net
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RME S-meter
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit

...is included with other meters at the usual place, number

230119062026

/scott

From: W7QH0@aol.com
Message-ID: <bc8.1183fc37.3360132f@aol.com>
Date: Tue, 24 Apr 2007 22:13:03 EDT
Subject: Re: Old 'Lytics
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="part1_bc8.1183fc37.3360132f_boundary"

--part1_bc8.1183fc37.3360132f_boundary
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: quoted-printable

Similar thread last year raised some interesting questions that sent me back=
=20
to various handbooks, Terman and the Internet.

In my design work as an EE and a ham over a 50 year period I must confess=
that I never paid too much attention to the finer technical points concern=
ing=
the application of electrolytic capacitors.=A0 The common rule of thumb was=
to=
allow a margin of safety, i.e., use a 450 working volt unit in a 300 - 350=
circuit. Paid attention to polarity, of course, and didn't use this type i=
n=
timing, RF, etc., applications.=A0 Was surprised to see an admonition the AR=
RL=
Handbook about running units "well below" their deigned working voltage.=A0=20=
Checked=
several editions and found the warning to be consistent but the consequences=
of=
doing so were never spelled out.=A0 The 1956 IT&T "Reference Data For Radio=
Engineers" warns against "extensive" voltage derating of electrolytics and n=
otes=
that a 450 volt unit operated at 300 volts will eventually become a 300 volt=
=
unit.=A0 This could be what the ARRL is talking about.=A0 Am sure I have use=
d 450=
volt units in 250 volt or less applications, especially in ham work over the=
=
years but don't recall any problems encountered=A0 in doing this.

As has pointed out, the chemistry of electrolytics has undergone several=
radical transformations in addition to the ongoing product improvements. Cor=
nell=
Dubilier now says electrolytics may be used at voltages lower that their=
ratings, see URL below which also gives a great rundown on how modern units=
are=
manufactured and other information.

<http://electrochem.cwru.edu/ed/encycl/misc/c04-appguide.pdf>

Dennis D. W7QH0
Glendale, CA

Dennis D. W7QHO
Glendale, CA

See what's free at <http://www.aol.com>.

--part1_bc8.1183fc37.3360132f_boundary
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

```
* * * * *
*      ---REMAINDER OF MESSAGE TRUNCATED---      *
*      This post contains a forbidden message format      *
* (such as an attached file, a v-card, HTML formatting) *
*      Mail Lists at theporch.com only accept PLAIN TEXT      *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *
```

--part1_bc8.1183fc37.3360132f_boundary--

Message-ID: <005701c786fd\$93507540\$b1e47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics
Date: Tue, 24 Apr 2007 22:30:54 -0700
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

> Don't forget temperature. Most modern electrolytics are rated to operate for so many hours at the specified voltage and some temperature. For example 1000 hours at rated voltage and 40 degrees C. That would include ambient temperature as well as component temperature due to ripple current. You would need a manufacturer's data sheet to look at the curves to get more definitive answers.

That's really the accelerated projected end of life. At the end of the 1000 hrs @ 40C the series resistance will not have increased by X amount. And that's probably at the peak of the bell shaped curve. How wide is the curve? The actual operating life at conservative voltage and temperature is

very hard to predict. Especially with the random distribution of other contributing failure factors like internal corrosion, temperature cycling, surge currents, ripple current, manufacturing defects, polarity reversals, soldering iron torture, gremlins, etc.....

Arden Allen
KB6NAX

Message-ID: <005801c786fd\$950b92c0\$b1e47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics
Date: Tue, 24 Apr 2007 22:38:05 -0700
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I had one blow that was on a HB supply about twenty years old. The
> supply was for a radio that I left on 24/7. The can hit the ceiling
> but the bad part is the gunk that sprayed on the ceiling, bench and
> other stuff, really hard to remove, almost like epoxy.

In high school I talked a friend into firing up an old radio on his bedroom floor. It was playing for a while until one the the lytics went off like a geiser spraying the ceiling with discoloring stuff. It was a liquid filled type. That's when I found out he wasn't supposed to play with radios in his bedroom. It guaranteed his banishment to the basement. Our friendship, fortunately, survived that catastrophe :-)

Arden Allen
KB6NAX

Message-ID: <025b01c78708\$f492d4a0\$0502a8c0@Belkin>
From: "Brian A Clarke" <brianclarke01@optusnet.com.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Old 'Lytics
Date: Wed, 25 Apr 2007 17:11:32 +1000
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Hi Arden,

What bell-shaped curve? All the curves I've seen from capacitor manufacturers are either exponential or S-shaped. The Arrhenius equation for capacitor life is of exponential form.

I suspect you are thinking of the MTBF curves - not the life vs risk factor curves. And MTBF curves are usually bath-tub shaped.

73 de Brian, VK2GCE.

Message-ID: <00b301c78723\$e0055740\$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Old Oil Filled (was: Old 'Lytics)
Date: Wed, 25 Apr 2007 05:24:14 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone ever have an oil-filled go off?
I did once; it was in a power supply for a 2KW 75 meter amp.
One of the 3-400s arced and Ka BOOM!
The power supply was in a wooden cabinet
with a closed door right in front of my knees.
The crimped top stuck in the wood.
Big mess.

Date: Wed, 25 Apr 2007 08:03:50 -0400 (EDT)
From: Jerry Proc <jerry7proc@yahoo.com>
Subject: Power Saving Device (Ya Right!)
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit
Message-ID: <451936.97111.qm@web90614.mail.mud.yahoo.com>

Hi Gang,

We haven't bashed any electrical/electronic "snake oil" in quite a while. I have come to the rescue by drawing attention to this power saving device guaranteed to save 30% power consumption or so it says.

Have a laugh!

<http://www.hydropowersaver.com/index.htm>

--

Regards,
Jerry Proc
E-mail: jerry7proc@yahoo.com

Get a sneak peak at messages with a handy reading pane with All new Yahoo!
Mail: http://mrd.mail.yahoo.com/try_beta?.intl=ca

Message-ID: <00e901c78739\$f5e59d20\$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Power Saving Device (Ya Right!)
Date: Wed, 25 Apr 2007 08:02:20 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Jerry Proc" <jerry7proc@yahoo.com>
Subject: Power Saving Device (Ya Right!)

> Have a laugh!
>
> <http://www.hydropowersaver.com/index.htm>

Hey- if you can find gullible rich people who will pay
\$500 for cryogenically-treated power sockets
and \$5000 for old blown-out Western Electric
speaker drivers, then "the sky's the limit."
The world is full of "doo-fi" (plural of "doo-fuss").
D.S.

Message-ID: <000001c7873d\$e28573a0\$5030bb40@k9a1e1>
From: "John Gillespie" <jgillespie@porchlight.ca>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "old tube radios" <boatanchors@theporch.com>
Date: Wed, 25 Apr 2007 09:29:07 -0400
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

Content-Transfer-Encoding: 7bit
Subject: Re: Power Saving Device (Ya Right!)

Hi Jerry:

Some pretty bold claims there! It will stabilize voltages and (Reduce) current by the use of a special capacitor? Read the bit (How it Works), about seeing the reduction in the speed at your wattmeter while using a kettle etc rated at 1 to 2 kw. an interesting claim! They say its a German design, but the text appears to be written in the new Chinese/English which requires several reads to comprehend. Could it be that Chinese ohms law is different? Quote! "you can on it continuously 24 hrs a day all year round without it affecting your electricity costs"

Subject: Power Saving Device (Ya Right!)
> We haven't bashed any electrical/electronic "snake
> oil" in quite a while.
> <http://www.hydropowersaver.com/index.htm>

Message-ID: <462F6CD1.6070607@comcast.net>
Date: Wed, 25 Apr 2007 08:59:29 -0600
From: "Herbert M. Rosenthal" <herbrose@comcast.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re Jerry's: We haven't bashed any electrical/electronic "snake...
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Fellow,

This deals with power factor, inductors, rectifiers, getters, so I guess it is (sorta) on track.

Shii Shii, Jerry (Chinese for thanks, according to my favorite buffet owner here in Albuquerque) for a good Wednesday morning chuckle on this device imported from China.

Energy for free, at last!

I read through the ad, and I must admit that their written instructions are improving, though still far from correct. Give them another 20 years and they will have it perfect. I saw one of these miracle boxes for a refrigerator, that promised 125% efficiency. "How do they do that?" Well, son, it's a secret component inside the box!

If I was selling these, I'd pay an American to get the grammar correct. Not a racist comment, I promise, just good business sense! Read the ad Jerry refers to and you will immediately spot many errors.

Reminds me of the many current devices, about wall-wart size, that were (probably still are) sold to increase the power factor of your refrigerator-and lower your electric bill. Absolute magic! And they are not cheap.

And then there was the automobile engine spark enhancer, an in-line inductor that plugged into the distributor center post and created a 'much hotter spark' (usually demonstrated at the fair grounds: hood open, spark did jump farther in a demo plug with the coil in place (of course one couldn't usually see the old wood-encased Ford coil (with interrupter on one end) that was hidden under the plywood demo board.) Switch the coil in and the rpms jumped way up (a hidden throttle mover.) Remember these?

But one item was sold in the 50-60s that I built (a Heathkit) to improve your car's gas consumption. It was built in a bronze colored heat sink metal box, had a couple of TO-3 switching power transistors and a large capacitor and other switching components within. According to specs, it changed the size of the spark according to the rpm you drove, etc. by using a capacitor discharge, controlled by the points' speed, to your coil instead of just the battery to the coil.

I had this one in my '65 Impala and I've wondered to this day whether there was any fact in science for this one. Heath's explanation seemed plausible. Bet some of you also had one of these capacitor discharge units-they were also sold over the counter as well as in kit form. I never did see an improvement in mileage..

Was/is the getter material in a vacuum tube made of a toxic material, and if so, did anyone ever worry about disposal of these to prevent seepage into a city's water supply? Comes now a front page feature item in this morning's Albuquerque Journal, discussing the coiled fluorescent lamps which are supposed to save the world with lower power consumption than standard incandescents... except they carry some mercury and the city doesn't want them in their dumps, leaching into the water supply. Another thing to worry about, and thus the thought of proper disposal--- 866s also come to mind :-).

Herb W5AN

From: "Grant Youngman" <nq5t@tx.rr.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Power Saving Device (Ya Right!)
Date: Wed, 25 Apr 2007 09:07:29 -0500
Message-ID: <000d01c78743\$0fed5880\$6401a8c0@GYGateway>
MIME-Version: 1.0

Content-Type: text/plain;
charset="US-ASCII"
Content-Transfer-Encoding: 7bit

> Some pretty bold claims there! It will stabilize
> voltages and (Reduce)
> current by the use of a special capacitor? Read the bit (
> How it Works),

Sounds like power factor correction ??

Grant/NQ5T

Content-class: urn:content-classes:message
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
Subject: RE: Power Saving Device (Ya Right!)
Date: Wed, 25 Apr 2007 09:32:30 -0500
Message-ID: <C2E12B15D2CA56409ED5354B2AA78B0D02E6FC22@eecsmail.eecs.local>
From: AB Bonds <ab@vuse.vanderbilt.edu>
To: Old Tube Radios <boatanchors@theporch.com>

This device most likely adjusts the power factor. Such gizmos CAN, in=
fact, reduce what looks like power consumption.

But wait....

What it does is to reduce the reactive power. This drops the measured=
current draw (apparent power) BUT doesn't do a thing for the average=
power, which is in the end what you pay for.

Bottom line, it may save the power company a few pennies for the reactiv=
e power loss in the transmission lines, but it ain't gonna impact your=
billfold.

Except, of course, what you pay for the gizmo.

A. B. Bonds

>=20
>=20
> ----- Original Message -----=20
> From: "Jerry Proc" <jerry7proc@yahoo.com>
> Subject: Power Saving Device (Ya Right!)=20

>=20
>=20
> > Have a laugh!
> >=20
> > <http://www.hydropowersaver.com/index.htm>
>=20
> Hey- if you can find gullible rich people who will pay=20
> \$500 for cryogenically-treated power sockets=20
> and \$5000 for old blown-out Western Electric=20
> speaker drivers, then "the sky's the limit."
> The world is full of "doo-fi" (plural of "doo-fuss").
> D.S.
>=20
>=20

End of BOATANCHORS Digest 4044
